

In the Footsteps of Lewis and Clark

**Steve F. Russell
Iowa State University**

**Presented at the Museum of the Rockies, Bozeman, Montana
by invitation of the Headwaters Chapter of the
Lewis and Clark Heritage Foundation**

August 16, 2004

Clark – The Map Maker



**Lolo Creek and Hungary Creek in the
Bitterroot Mountains of North-Central Idaho**

Lewis – The Naturalist



Clarkia or “Pinkfairies” or “Ragged Robin” *Clarkia pulchella* (Pursh)

My Interests and Goals



Interests and Goals

- Scholarly research on historic trails with original journals, original maps, and field work
- Work with state and federal agencies on historic preservation
- High-accuracy GIS results using ARCVIEW and GPS
- Natural history documentation: geology, plants, animals
- Archival results: publications and documentation in state historical society journals

Steve F. Russell on The Lewis and Clark Trail



Research Methodology

- **What I do**
 - Document the history and location of historic trails
 - Apply the best technology and academic research methods available
- **How I do It**
 - Use original journal and map sources from the National Archives and other research libraries
 - Apply computer technology to the journals and maps to determine the best probable location of the trails
 - Dedicate summer months to extensive field work (exploring and camping)
 - Create detailed maps of the trail location using geographic information system technology
 - Document the results by various archival means

Land of the Nez Perce



Ancient Rock Cairns

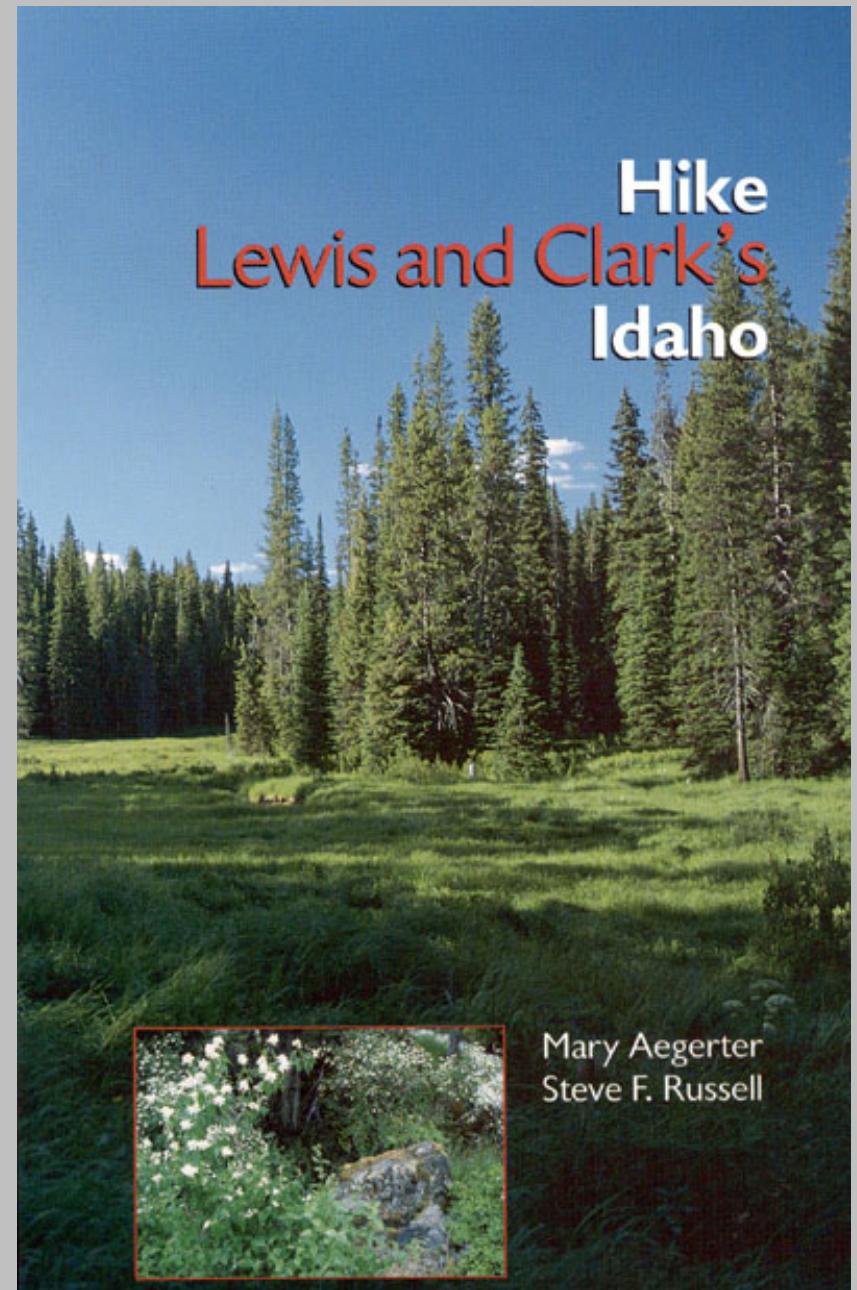
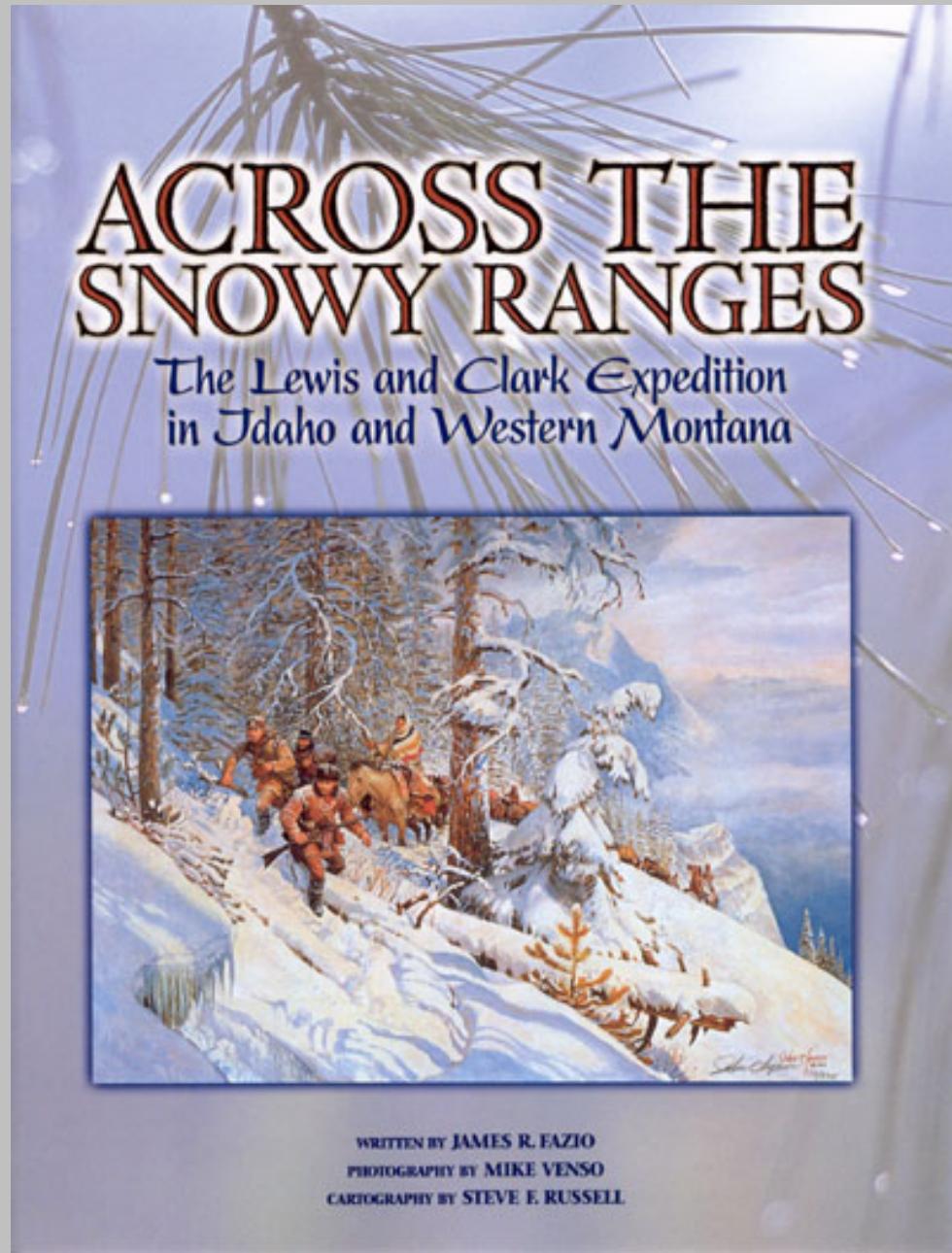
Camping With the Nez Perce



Results and Activities

- Books
- Monographs
- Journals
- Workshops
- Presentations
- National Media
- Web Sites

Books



Newspapers



High-tech equipment used to plot Lewis

Satellites, journals aid professor as he traces historic trail

By DAN GALLAGHER
Associated Press Writer

BOISE, Idaho — For 15 summers, Iowa State University engineering professor Steve Russell has scrambled along the same forest deadfall and rocky hillsides that Meriwether Lewis and William Clark's Corps of Discovery encountered in Idaho's mountains two centuries ago.

But instead of a flintlock rifle and trade beads, Russell carries state-of-the-art mapping equipment to pinpoint within several feet the actual ground the expedition crossed as it went west over the treacherous Bitterroot Mountains in 1805 to reach the Lewiston area and the Nez Perce Tribe who acted as Samaritans to the starved and weary explorers.

"The Lolo Trail spans a land of history, exploration, courage, and danger," Russell said. "It is regrettable that we will never be able to fully learn about its early history but



1999 AP file photo

Iowa State University engineering professor Steve Russell looks at a pasture near Ross' Hole, Mont., in July, where Lewis and Clark met the Salish Tribe before crossing Montana's Bitterroot Mountains.

began. The route is largely untouched from the time it served as changed so much. The mountain-
the North and Middle Forks of the

Workshops

“On the Trail with Lewis and Clark”
Sawtooth Science Institute
Idaho State University
2002



Lewis' first Idaho Campsite

Presentations

Welcome to a preview of the Lewis and Clark Symposium Presenters:



Dr. Joseph Musselman, featured speaker, noted teacher, humanist, and author, has gained a nationwide reputation as a serious student of the Lewis and Clark expedition. He has written several articles and created maps of the expedition's route for several books, including *Along the Trail with Lewis and Clark*. He is also the producer and principal writer for the encyclopedic web site, *Discovering Lewis & Clark* (www.lewis-clark.org), which currently exceeds 1,500 pages. Dr. Musselman will present the program, "Filling in the Zeros: Space, Pace, and Place on the Lewis & Clark Trail" on June 20, and "Men in High Spirits: Humor on the Lewis & Clark Trail" on June 21. Dr. Musselman will also be performing music of the time of Lewis & Clark – In Greatest Harmony: "Medicine Songs" on the Lewis & Clark Trail at Brackenbury Square on Main St., Lewiston, Idaho.



Ron Craig, filmmaker-author, has made a one-hour documentary on "Who was York?" York was the only African-American member of the 1803-06 Corp of Discovery's expedition to the Northwest. Ron will present his program on June 20 entitled, "Who was York? A New Look at the Lewis and Clark Expedition."



Ken Karsmizki, noted archeologist, works with NASA combining airborne and satellite imagery with historic maps and Lewis & Clark journals to locate sites along the trail. On June 21, Ken will discuss the use of satellite remote sensing equipment in location and analysis of Lewis and Clark campsites.



Steve Russell, Associate Professor, Iowa State University, has researched the historic trails of the Lolo Trail corridor. His methods include the study of old maps, early aerial photos, pioneer survey notes, National Archive records and the journals of the expedition of Lewis and Clark. On June 21, Steve will present his program entitled, "Ordway's Salmon Fishing Excursion," and participate in a panel discussion of the study on the trail. He will also be involved in a book signing event at the Lewis-Clark Center for Arts and History on June 21. Steve will provide participants with historical overviews and interpretations on the bus tour to the Salmon Trout Camp

Journals

The cover of the journal features a large red title "IDAHO YESTERDAYS" at the top. Below it is a decorative banner with the text "VOLUME 44" and "THE JOURNAL of the IDAHO STATE HISTORICAL SOCIETY". The number "44" is prominently displayed in the center of the banner. Below the banner, the issue number "No. 1, Spring 2000" is printed. The background of the cover is white with some faint, illegible text or images.

FEATURES

3 The Main Line Comes to Boise
by BARBARA PERRY BAUER

13 Report on the Feasibility of Irrigating and Reclaiming Certain Desert Lands in the Payette Valley, Ada County, Idaho
by P. J. KINNEY

25 The Riddle of Hungry Creek, September 18-20, 1805, and June 16, 18, 25, 1806
by STEVE F. RUSSELL

Map of Ada County, Idaho
Showing Geographical Features, Mathematical Items, Political Subdivisions

On the Trail of Lewis and Clark

THE RIDDLE OF HUNGRY CREEK

SEPTEMBER 18-20, 1805,
AND JUNE 16, 18, 25, 1806

by Steve F. Russell

Fascination with the route and camping places of Lewis and Clark has remained strong for more than 100 years. With the approaching bicentennial of the Corps of Discovery, this interest is only intensifying. What is more, increasing numbers of people are interested in following the route themselves—not always a wise idea, as is certainly the case with the area described here.

This is the first in a series of articles that Steve Russell is preparing on his research of the route and camping sites as the Corps of Discovery crossed the mountains from the Missouri River basin to the Columbia River basin. Their passage through Hungry Creek and Fish Creek took them across what is now the Clearwater National Forest of north-central Idaho. They came through the area four times, once in 1805 and three times in 1806. The documentation of their various journals leaves us with a wealth of clues as to the route they followed, although William Clark's maps for this area are of limited value because of their topographic distortion.

The author, who was born in Lewiston, is an electrical engineer on the faculty of Iowa State University. His work on this project has grown as he has been more and more intrigued by the landscape crossed by the Corps—the campsites, the tread of prehistoric and historic trails, and the often very difficult terrain. His bibliography appears at the end of the article.

History of the Area The Nez Perce

Before they obtained the horse, the Nez Perce used foot trails to travel to important camping areas and family sites in the mountains, but these trails were probably very limited. After they began using horses for travel, things were different: frequent and relatively easy travel over a wide area became possible. Of the numerous Nez Perce horse trails, four were significant for this research.

The first was the southern branch of the Nez Perce trail followed by Lewis and Clark through Hungry, Fish, and Eldorado Creeks. The second was a trail that went from upper Hungry Creek over Austin Ridge and down to Lolo Forks and then on to Musselshell Meadows. The third was the northern branch of the Nez Perce trail that went over Snowy Summit. The fourth route was the old Pete King Trail that went from the Lochsa River northward along the ridges to the Lolo Trail at Pete Forks Junction. It is highly probable that this trail had its origins in an ancient Nez Perce trail which connected villages on the upper Clearwater River with the Lolo Trail. In fact, it was probably the main link that connected the trails at the junction of the Lochsa and Selway Rivers with the Lolo Trail. For this article, the key part of the Pete King Trail is the segment that

went north and south through Fish Creek Meadows. Most of this trail has been abandoned, and the lower elevations of the trail have been significantly impacted by logging activities. The upper trail was incorporated into the fire-suppression trail system by the Forest Service.

The northern branch, which went over Snowy Summit, is the easiest route of the Lolo Trail System to follow into the Weippe Prairie. It is this route that George B. Nicholson chose for the Lewiston and Virginia City wagon road survey in 1866 and the route over which the Bird-Trux Trail would be constructed.¹ Why Lewis and Clark followed the southern branch through such rugged country when a much easier route (Snowy Summit) was available is still puzzling. My opinion is that the Hungry Creek route was used in early spring and late fall (an early-late route) when Snowy Summit was buried in deep snow. Another possibility is that this route was the one pointed out to unknown strangers entering the land of the Nez Perce.²

Olin D. Wheeler's explorations, undertaken in observance of the Corps of Discovery's centennial, led him to choose the route from Hungry Creek to Austin Ridge and then down to Lolo Forks. This was no doubt a good Nez Perce trail in his time, but the route does not match the journal descriptions or courses and distances.³

Emmy Wining Video



**ECHOES OF A BITTER CROSSING
LEWIS &
CLARK
IN IDAHO**

Video Available

Lewis and Clark were the first white men to set foot in Idaho. No other state can make that claim. But their fabled journey through Idaho's Bitterroot Mountains nearly defeated the Expedition. Two hundred years later Idaho Public Television examines the most difficult part of the Lewis and Clark Trail with a modern day group of explorers.

Copies of the hour long "Echoes of a Bitter Crossing: Lewis & Clark in Idaho" are available for purchase from Idaho Public Television by calling toll free 1-877-224-7200 or, in Boise, 373-7220. The cost of the video is \$19.95 (\$20.95 with tax).

Also available is the half-hour OUTDOOR IDAHO version, "Lewis & Clark in Idaho". The cost of this video is \$16.95 (\$17.80 with tax).

There is a shipping fee of \$4.00 for the first tape and \$.50 for each additional tape.

ORDER

BACK TO: [Lewis & Clark In Idaho](#)

Websites

The banner image shows a group of people, likely Lewis and Clark's expedition, walking through a misty, wooded landscape. In the upper right corner, the title "ECHOES OF A BITTER CROSSING" is written diagonally above the main title "LEWIS & CLARK IN IDAHO".

Program Description

The Interactive Journey

Historian Gary Moulton

A GPS Expert on the Trail ←

A Campfire Discussion

Dugout Canoes on the Clearwater

What If... The Salmon River

The Journey of Sacagawea

A Native American Perspective

The Return Trip

Video Available

Watch the Show

Test Your Knowledge

Related Sites

A Production of Idaho Public Television

Monographs

Lewis and Clark Between the Rivers



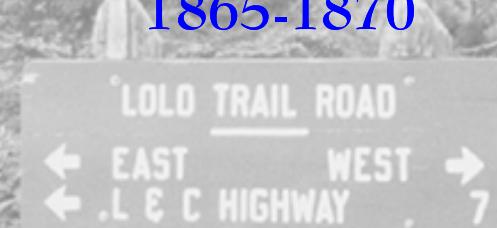
Smoking Place

Steve F. Russell

HTR Publication No. 01

June 2001

Microfilm Records of the Virginia City and Lewiston Wagon Road 1865-1870



The historical microfilm records including the
Bird-Truax Trail in northern Idaho

Transcribed and edited by the Author

STEVE F. RUSSELL, PH.D., P.E.
Associate Professor
Iowa State University

Websites

Lewis and Clark Across the Mountains *An Engineer Tracks the Trail*

This site is the work of Steve Russell, a professor of Electrical Engineering at Iowa State University, who grew up in the Bitterroots, and who is the co-author of *Across the Snowy Ranges: The Lewis and Clark Expedition in Idaho and Western Montana...*

 Introduction  Lolo Trail Map Read about Historic Preservation Touring the Route of Lewis and Clark	<p>Join the Corps of Discovery as they traverse the Lolo Trail in 1805</p> <ul style="list-style-type: none">• Travel back in time 200 years.• View the difficult mountain ranges as the explorers saw them.• Map their actual path across the Bitter Root Mountains.• See the actual trail traveled by the expedition• Visit some of their campsites.• Experience their desperation to get through the mountains. <p>Read the introduction by clicking on the scroll to the left or immediately begin the journey by clicking on the map.</p>  Self Discovery Experience
	

[Go back to the beginning](#)

[Credits](#)

Presentations

Fourth Annual Lewis and Clark Symposium

"Trails Through Time"

June 20-22, 2002

*Lewis-Clark State College
Lewiston, Idaho*

Two Centuries, Two Peoples: A Confluence of Histories

The 2002 Symposium will focus on mapping, studying, and retracing a part of the trail of the Corps of Discovery through the land of the Nez Perce. Speakers will present more specific views of culture, preservation, protection and the interaction of the two peoples:

***The Nez Perce Tribe and the
Lewis and Clark Corps of Discovery***

*"...this hi Mountain is covered with Spruce & Pitch pine fir..." Capt. Clark, September 13, 1805
(Lolo Summit)*

The End

Questions?